



# TROPICAL UPDATE



11:00 AM EDT

Friday, July 24, 2020

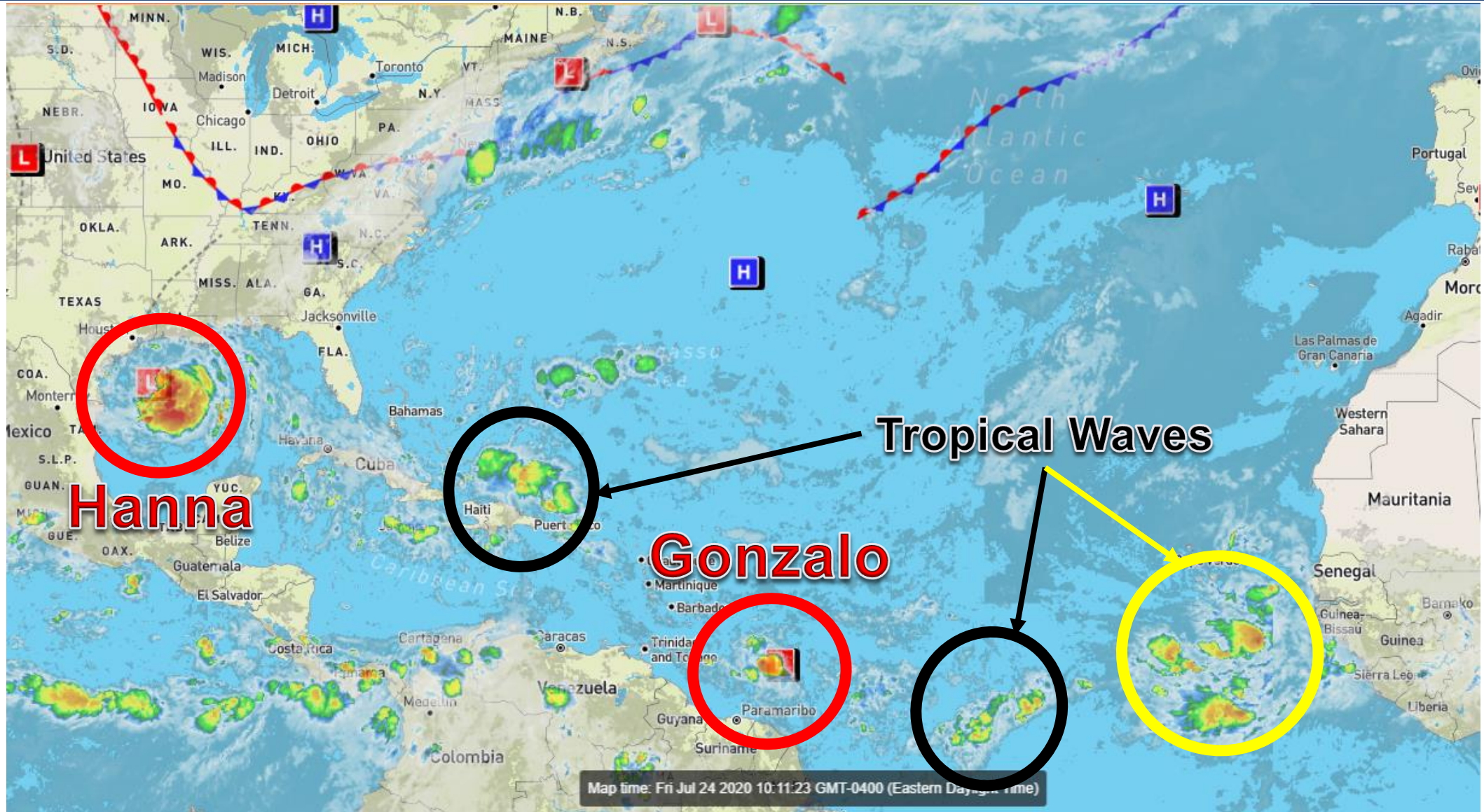
Tropical Storm Gonzalo, Tropical Storm Hanna &  
Eastern Atlantic Wave (30%)

This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office, or visit the National Hurricane Center website at [www.hurricanes.gov](http://www.hurricanes.gov).



# Atlantic Basin Satellite Image

Chance of development: — None — Low — Medium — High



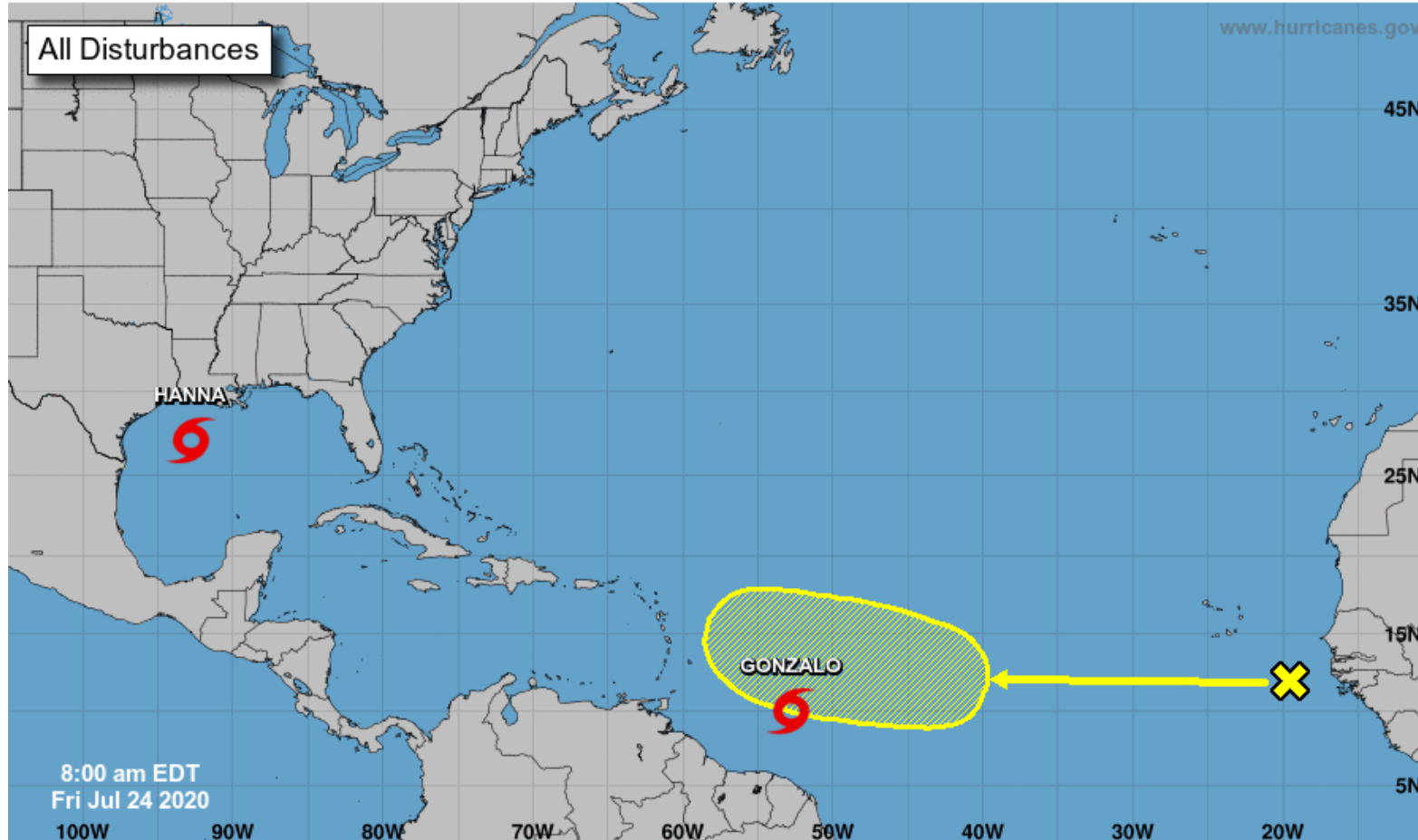


# Tropical Weather Outlook

Possible Areas of Development During the Next 5 Days ([LINK](#))



## Five-Day Graphical Tropical Weather Outlook National Hurricane Center Miami, Florida



Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%  
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane  
 Post-Tropical Cyclone or Remnants



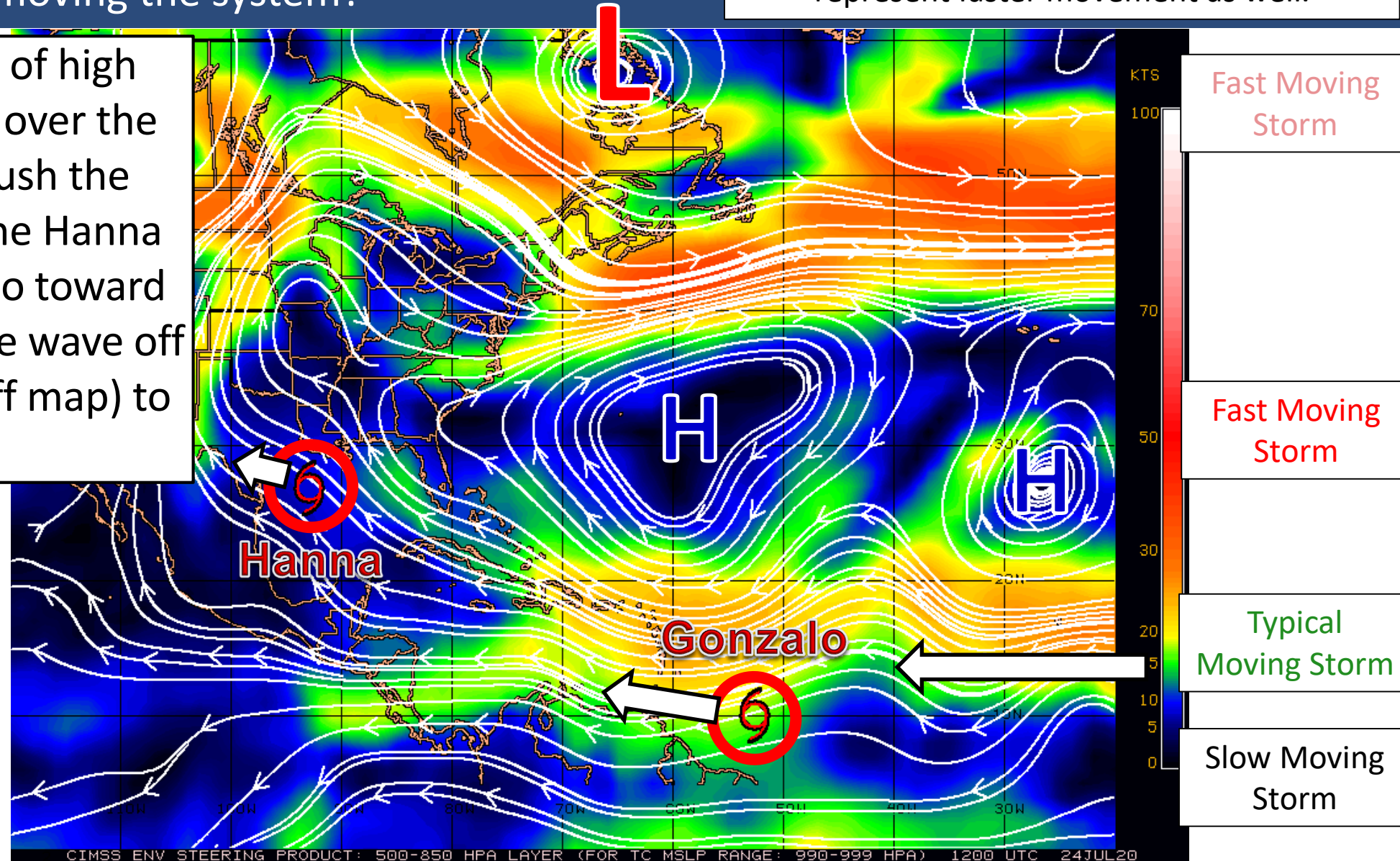


# Steering Currents

What is moving the system?

Color denotes the movement speed through the atmosphere and thin white lines denote direction. Tightly clustered white lines represent faster movement as well.

A large, strong area of high pressure is centered over the Atlantic. This will push the tropical systems to the Hanna toward Texas, Gonzalo toward the Caribbean, and the wave off the coast of Africa (off map) to the west.





# Wind Shear

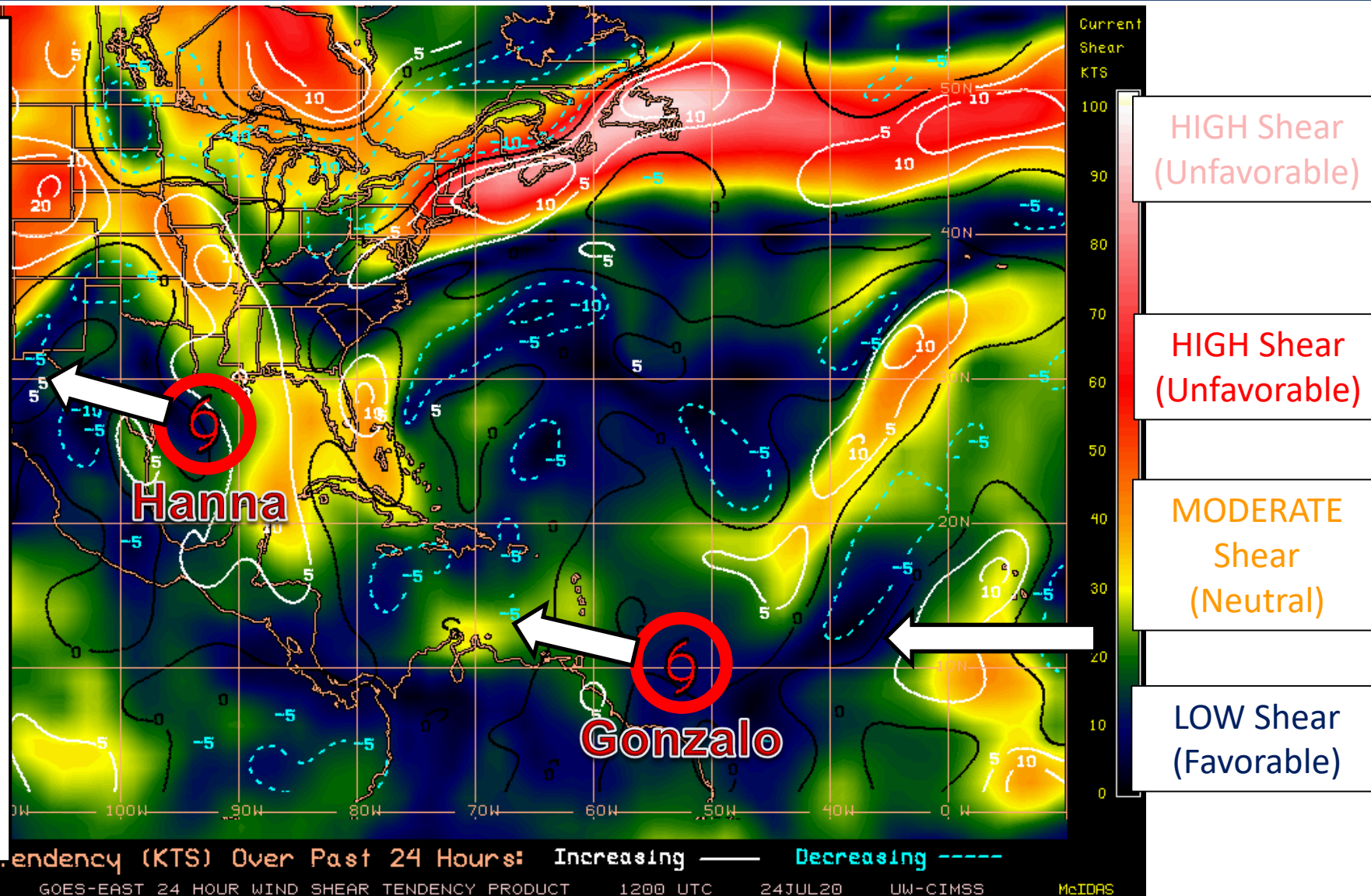
Is the environment favorable for the system?

Color denotes the amount of wind shear and the lines denote how it have changed over the last 24 hours (dotted lines show decreasing shear and solid lines show increasing).

Wind shear around Hanna remains low, which will provide opportunity for strengthening.

Wind shear remains light around Gonzalo, but will increase once it gets into the Caribbean.

Wind shear over the eastern Atlantic is high, but should lessen as the wave moves westward.



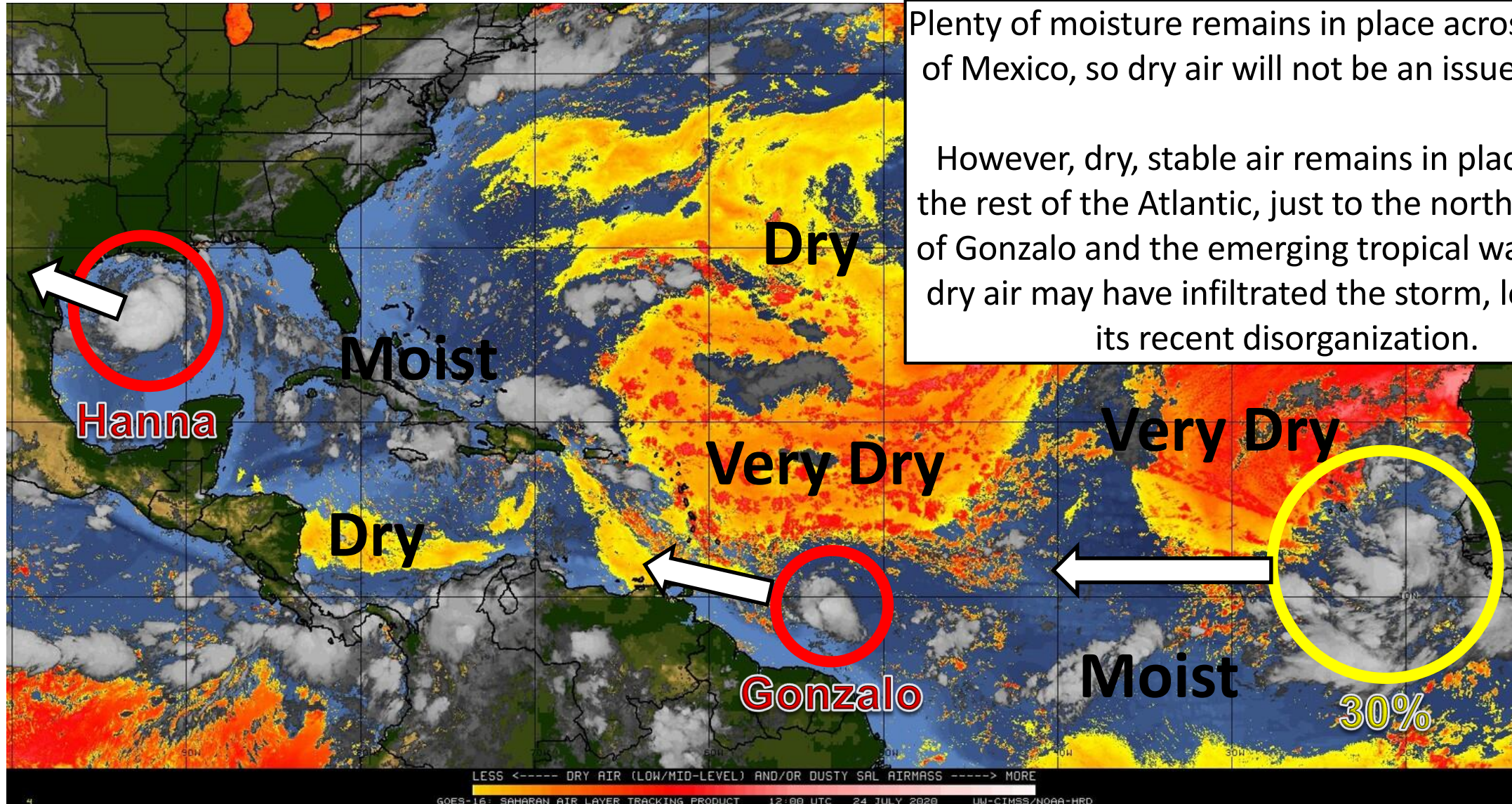




# Dry Air & Saharan Dust

Is the environment favorable for the system?

Color denotes concentration of Saharan Dust or dry, stable air.



Plenty of moisture remains in place across the Gulf of Mexico, so dry air will not be an issue for TD 8.

However, dry, stable air remains in place across the rest of the Atlantic, just to the north and west of Gonzalo and the emerging tropical wave. Some dry air may have infiltrated the storm, leading to its recent disorganization.





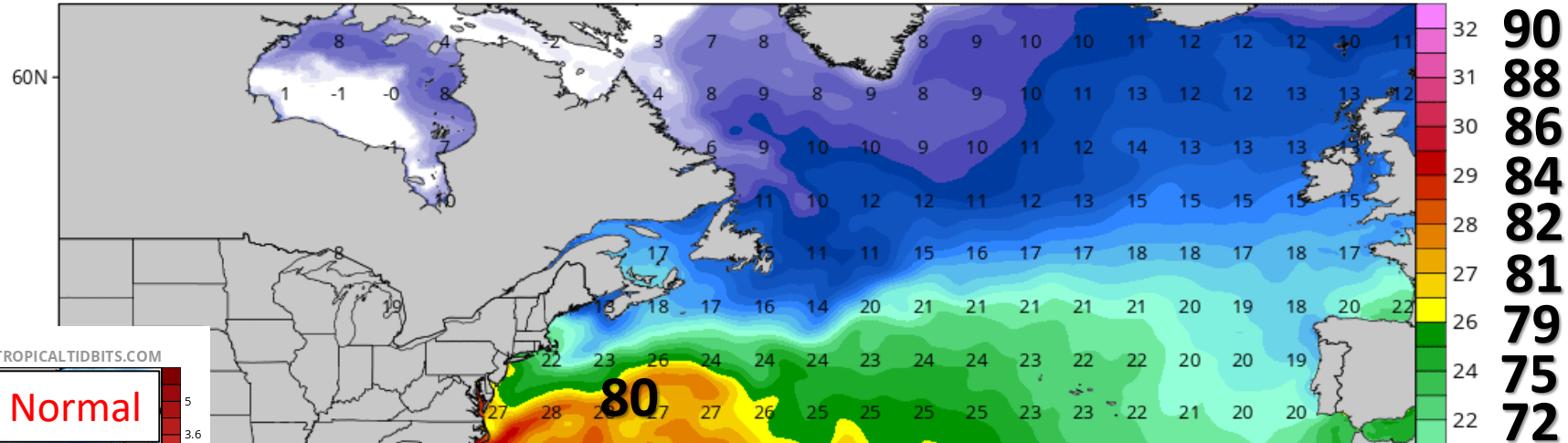
# Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

Water temperatures are supportive for tropical development across the entire Atlantic basin.

CDAS Sea Surface Temperature (°C)

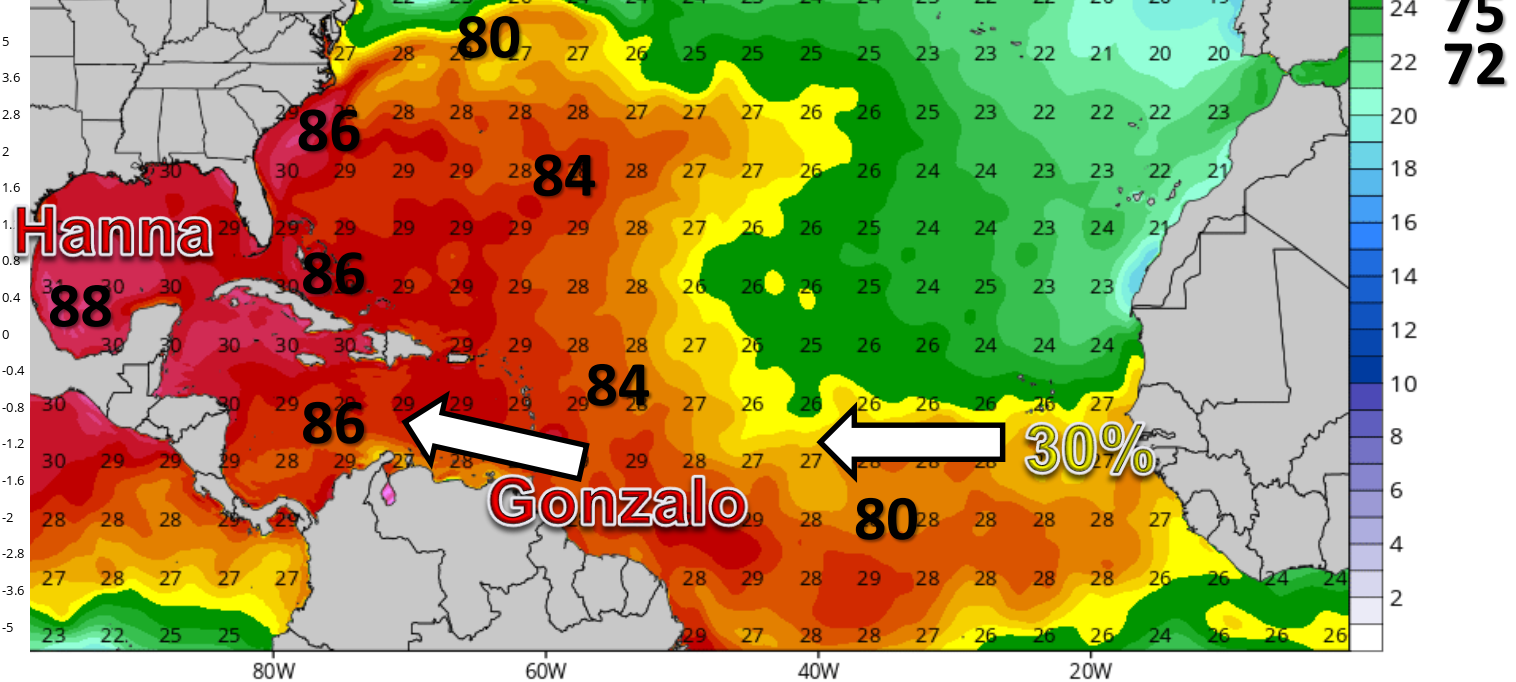
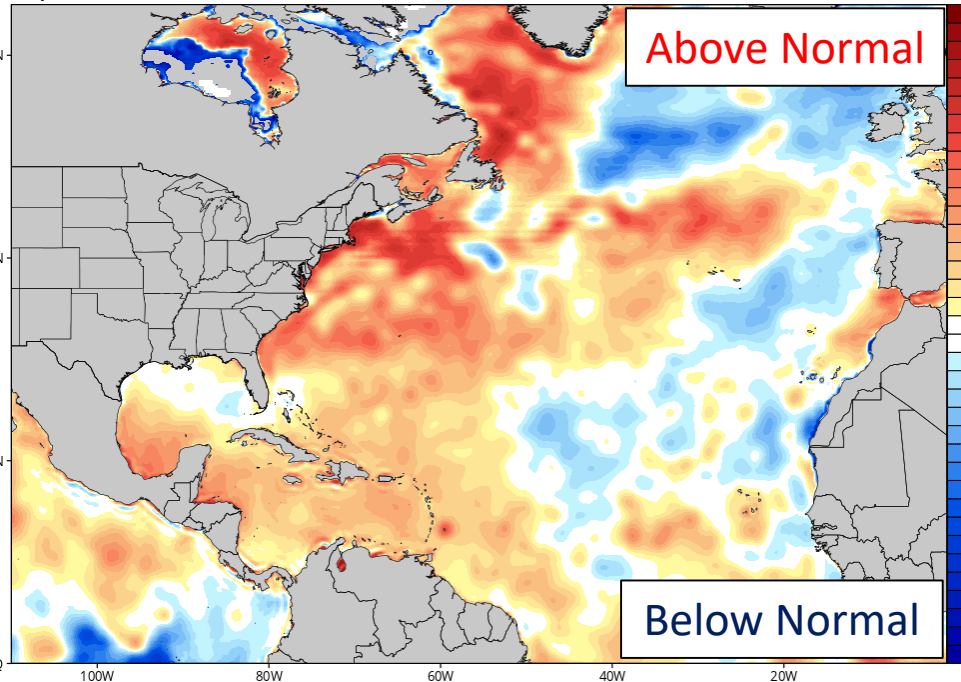
Analysis Time: 06z Jul 24 2020



CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)

Analysis Time: 06z Jul 24 2020

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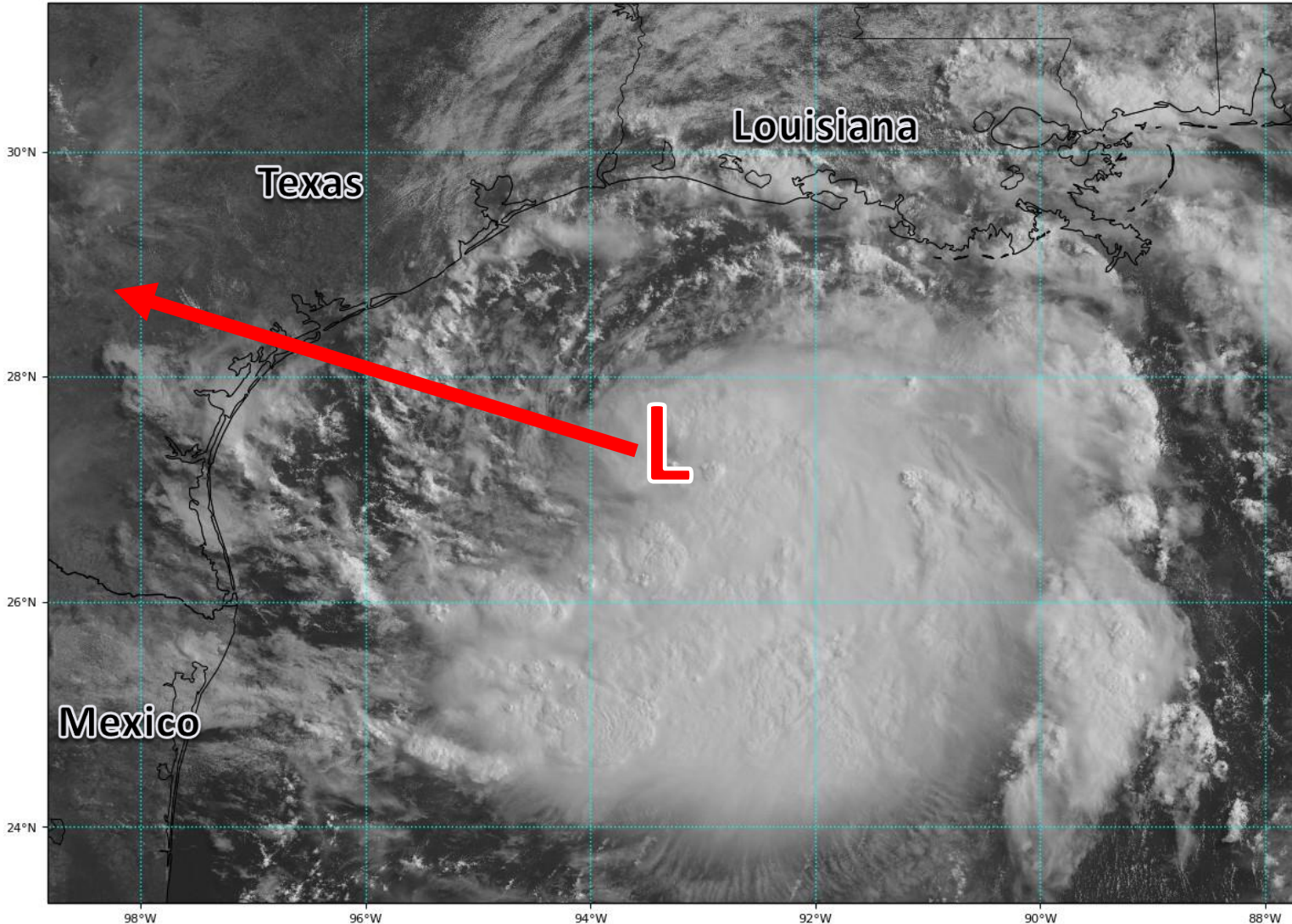


# Satellite Imagery

## Gulf of Mexico - Tropical Storm Hanna

GOES-16 Channel 2 (visible) Reflectance at 14:22Z Jul 24, 2020

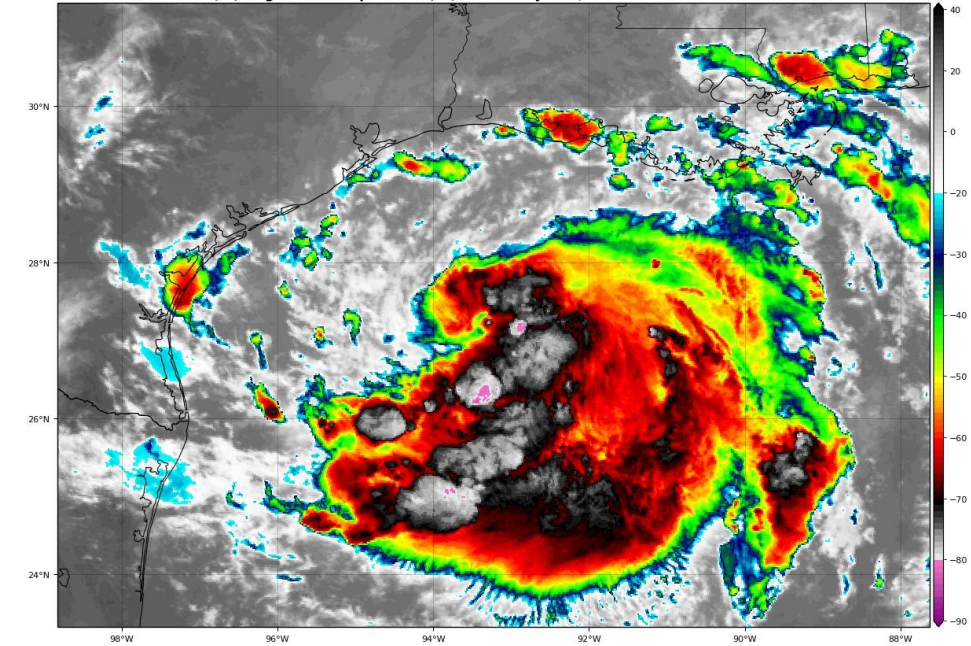
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Tropical Storm Hanna has become much better organized over the last 24 hours with convection now near the center. Continued organization and strengthening is forecast until landfall along the Texas coast.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 14:27Z Jul 24, 2020

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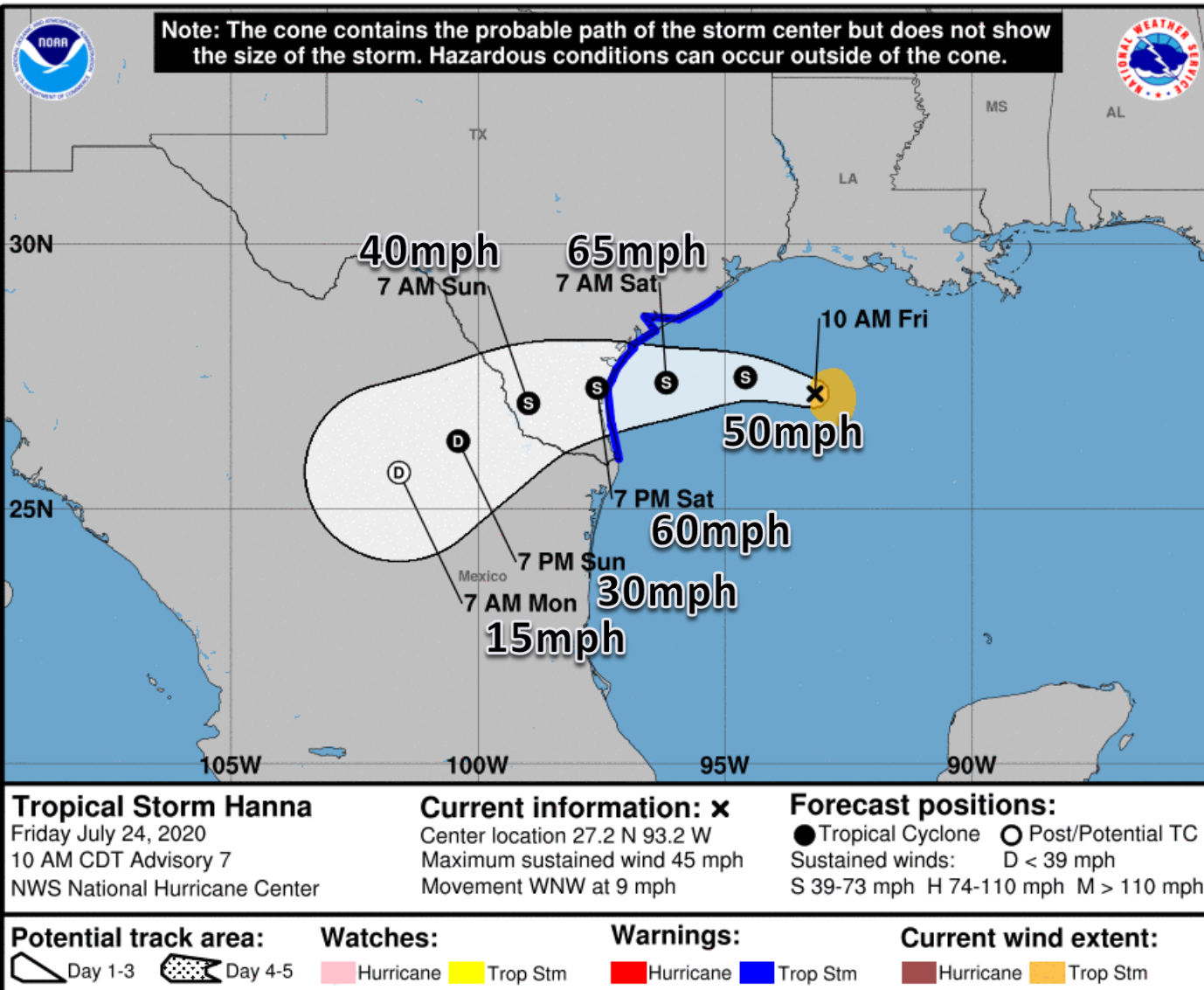






# Official Forecast Track

## From the National Hurricane Center – Tropical Storm Hanna

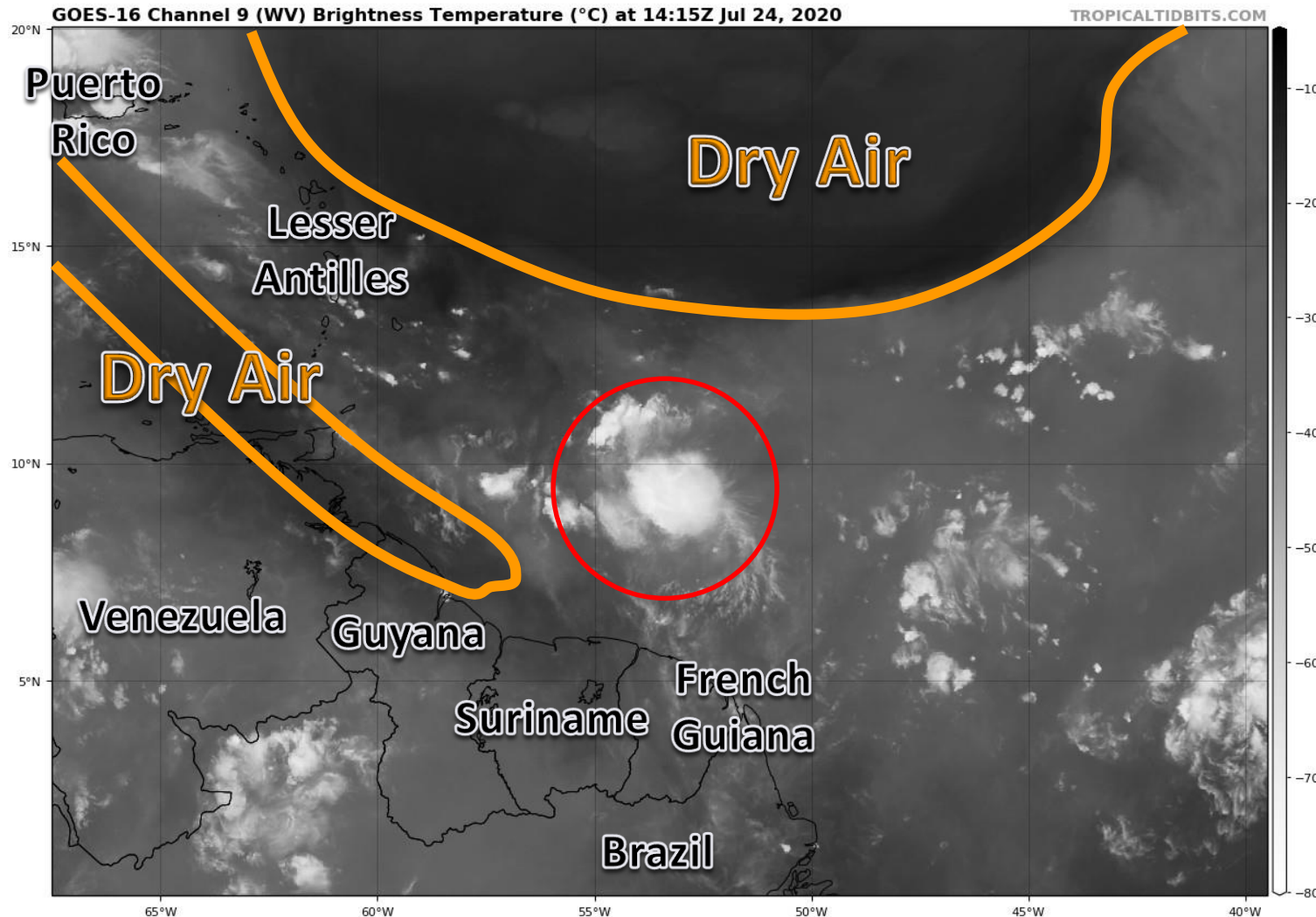


- The center of Tropical Storm Hanna is about 260 miles east of Corpus Christi, TX
- Maximum sustained winds are near 45 mph and gradual strengthening is forecast until landfall.
- Hanna is moving to the west-northwest at 9 mph. A turn toward the west is expected later tonight, followed by a west to west-southwest motion this weekend.
- Hanna should make landfall in Texas on Saturday.

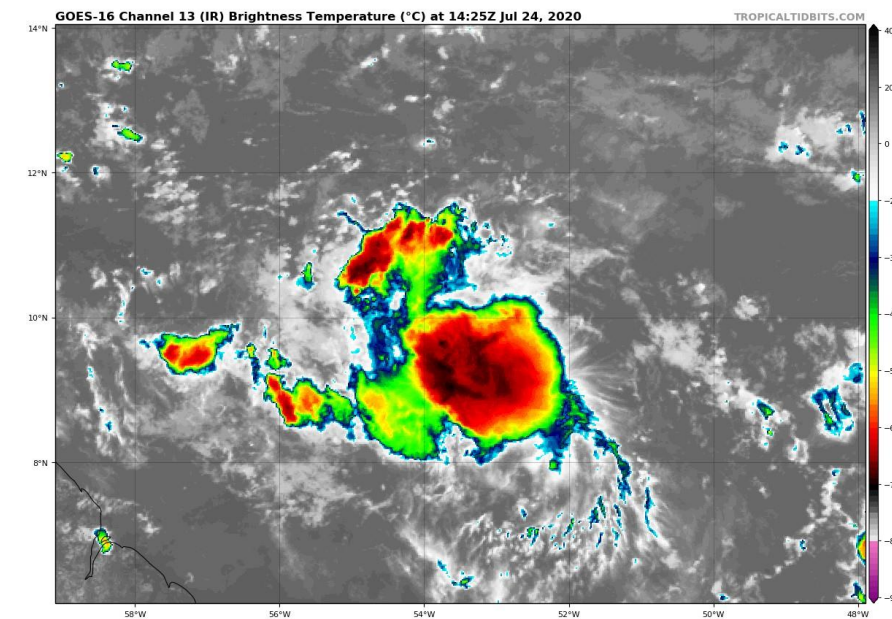


# Satellite Imagery

## Central Atlantic – Tropical Storm Gonzalo



Gonzalo remains rather disheveled this morning after being impacted by dry air yesterday. The dry air has retreated a bit since yesterday, which will allow for a brief window of strengthening. However, conditions become unfavorable for strengthening once it enters the Caribbean.

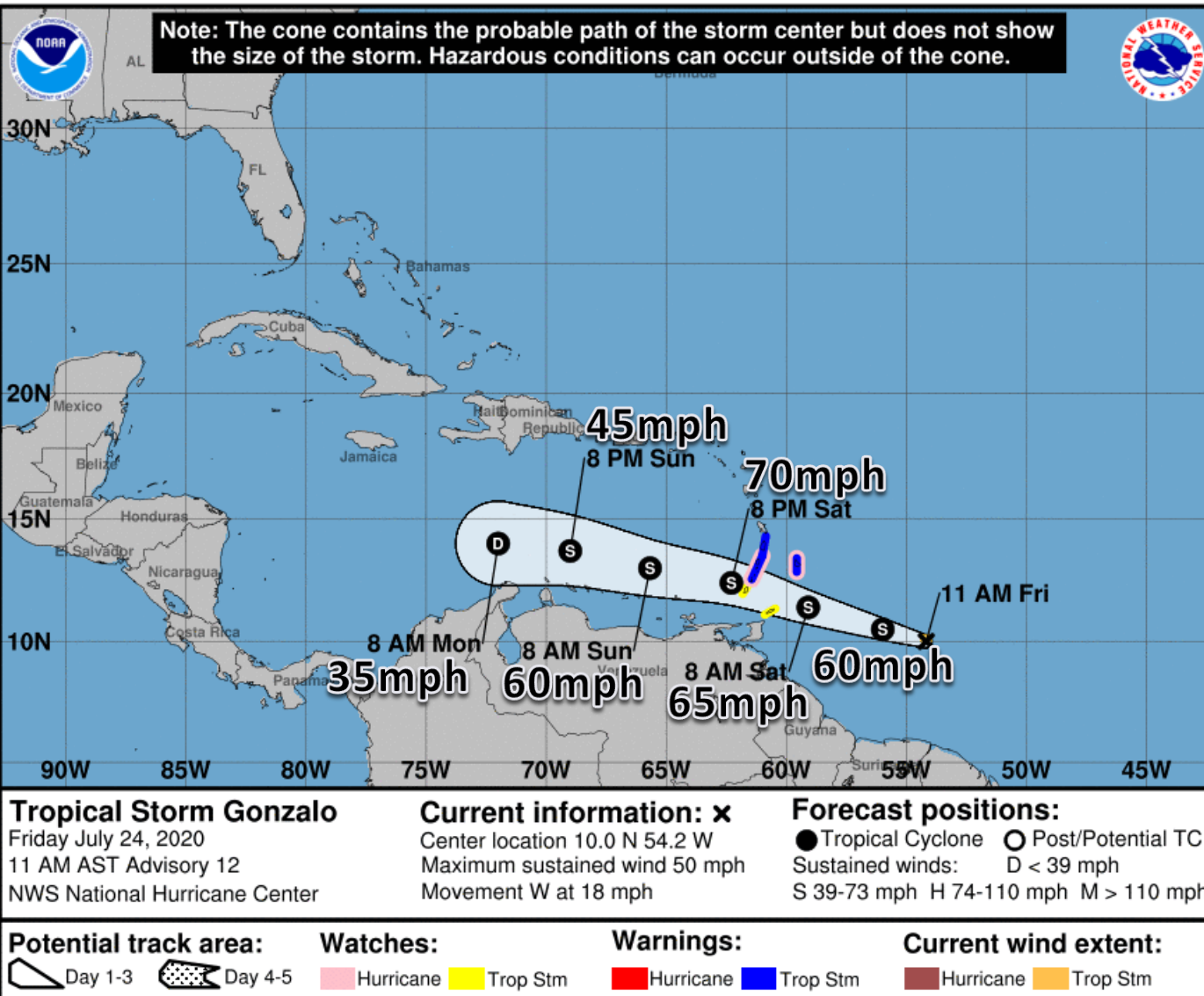






# Official Forecast Track

## From the National Hurricane Center – Tropical Storm Gonzalo



- The center of Tropical Storm Gonzalo is about 485 miles east of the southern Windward Islands.
- Maximum sustained winds have decreased to near 50 mph. Some strengthening is still possible during the next 24-36 hours, but weakening should occur thereafter.
- *There is still uncertainty in the intensity forecast of Gonzalo.*
- Gonzalo is moving to the west at 18 mph, and a west-northwest movement is expected over the next few days
- Gonzalo is forecast to dissipate in about 72 hours.



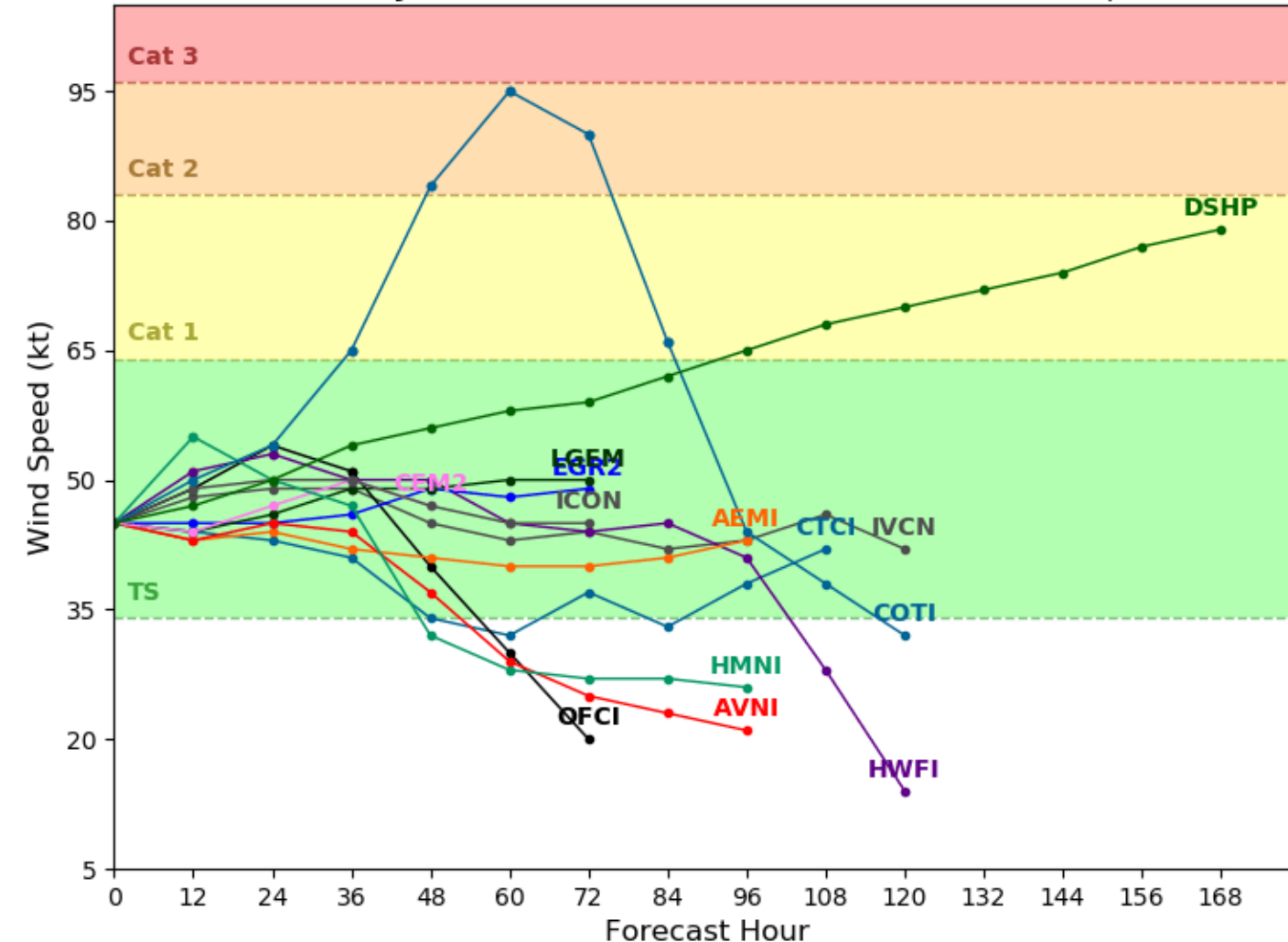
# Model Forecast Intensity

## Dynamical and Statistical Models – Tropical Storm Gonzalo

### Tropical Storm GONZALO Model Intensity Guidance

Initialized at 12z Jul 24 2020

Levi Cowan - tropicaltidbits.com



Most models now call for Gonzalo to remain nearly steady in intensity or weaken over the next few days. Some models show dissipation in the next 3 to 5 days.

The National Hurricane Center is forecasting a Category 1 hurricane in the next 24 hours, followed by dissipation in 72 hours.

Small systems in this part of the Atlantic are difficult to forecast! Stay tuned to the forecast.



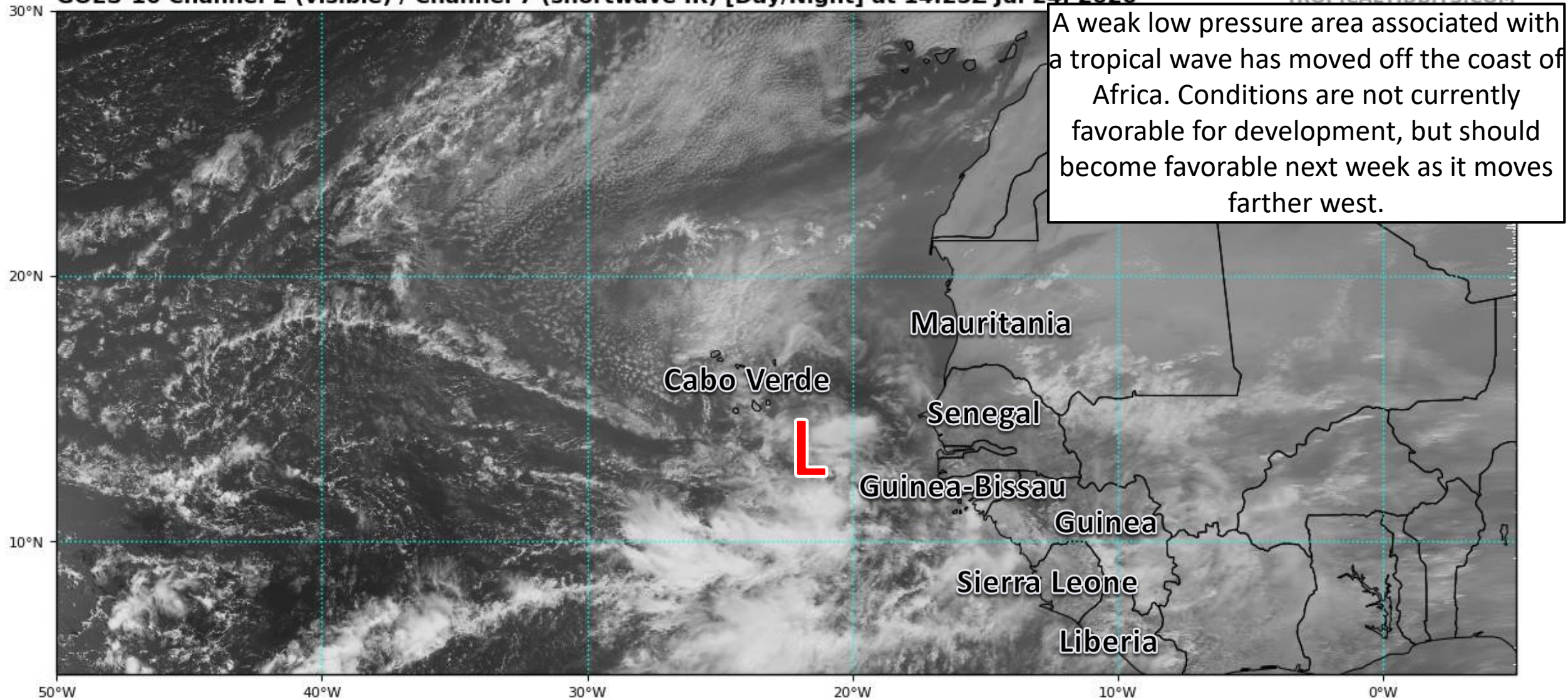


# Satellite Imagery

## Eastern Atlantic – Tropical Wave

GOES-16 Channel 2 (visible) / Channel 7 (shortwave IR) [Day/Night] at 14:25Z Jul 24, 2020

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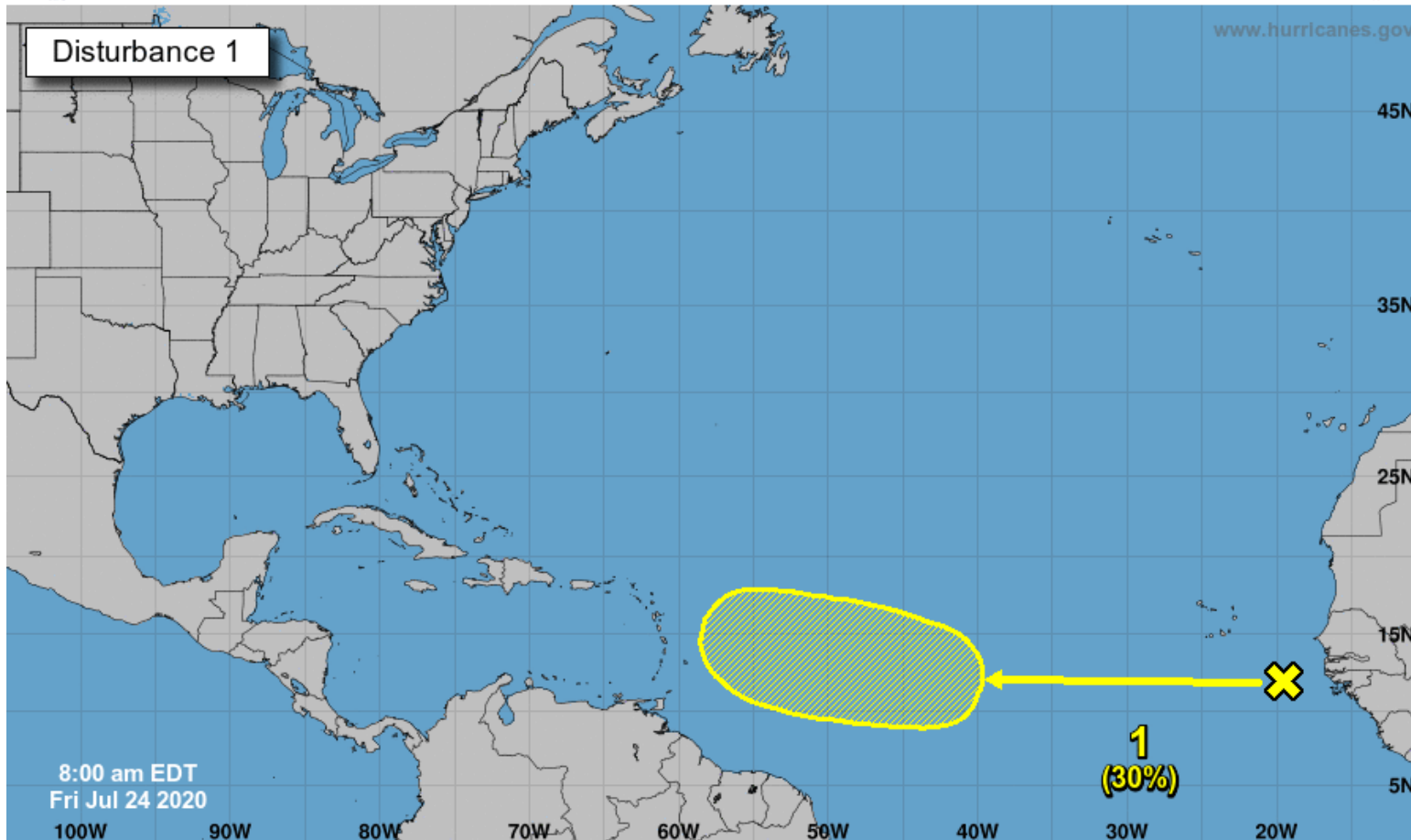
# Tropical Weather Outlook

Possible Areas of Development During the Next 5 Days ([LINK](#))



## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



A tropical wave located about 300 miles southeast of the Cabo Verde Islands is producing an area of cloudiness and disorganized thunderstorms. The disturbance is expected move westward across the tropical Atlantic during the next several days, and some gradual development of this system is possible by early next week when it reaches the western tropical Atlantic

**\*Formation chance through 48 hours...low...near 0 percent.**

**\*Formation chance through 5 days...low...30 percent.**

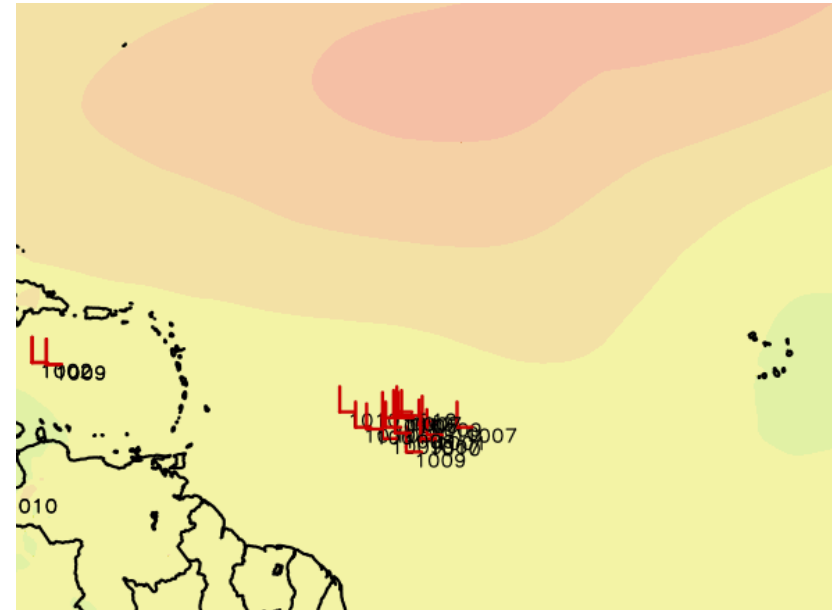
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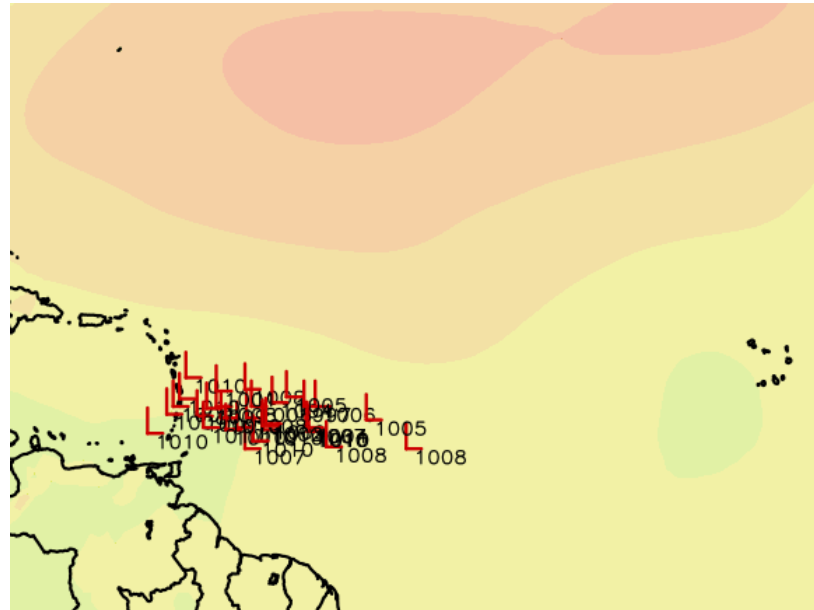


# Model Forecast Tracks

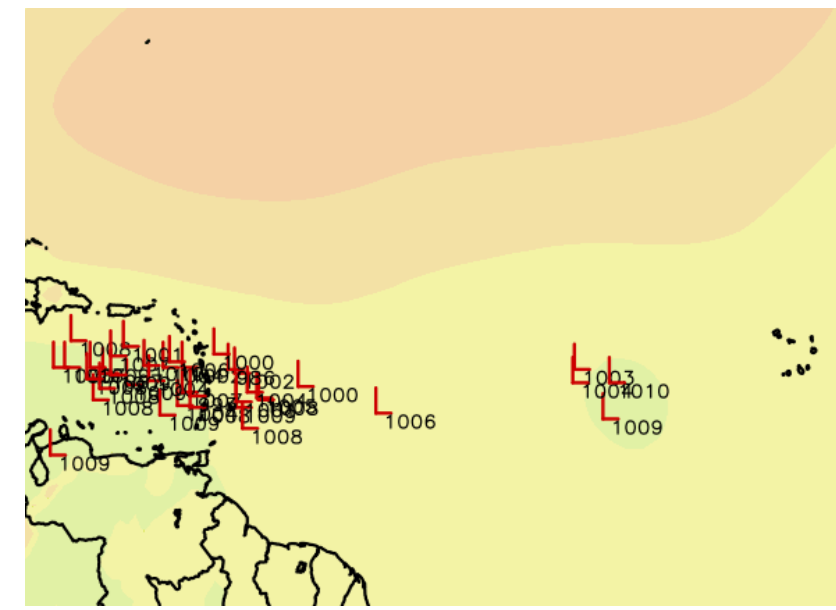
## Ensemble Models



**Monday Evening**



**Tuesday Evening**



**Wednesday Evening**

Conditions become more favorable for the tropical wave to develop as it moves closer to the Lesser Antilles and the Caribbean. The tropical wave should move into the Caribbean in about 5-7 days. *This wave will be monitored.*



# Overall Summary

## **Tropical Storm Hanna**

- As of the 11 AM ET advisory, the center of Hanna is located about 260 miles east of Corpus Christi, TX, moving west-northwest at 9 mph.
- Maximum sustained winds are near 45 mph, and additional strengthening is forecast until landfall on Saturday along the Texas Gulf Coast.

## **Tropical Storm Gonzalo**

- As of the 11 AM ET advisory, the center of Gonzalo is located about 485 miles east of the southern Windward Islands, moving to the west at 18 mph.
- Maximum sustained winds have decreased to near 50 mph, and Gonzalo is still forecast to strengthen over the next 24-36 hours.
- However, the current intensity and thus the forecast are uncertain. Gonzalo is forecast to dissipate in about 3 days in the central Caribbean.

## **Eastern Atlantic Tropical Wave**

- A tropical wave about 300 miles southeast of the Cabo Verde Islands will continue to move westward over the tropical Atlantic through the next 5 days.
- This system has a 30% (low) chance of formation during the next 5 days.
- This system is forecast to move into the Caribbean in about 5-7 days.





# Overall Summary

## Florida Outlook:

- Tropical Storm Gonzalo and Tropical Storm Hanna are not expected to have direct impacts on Florida. Gonzalo will continue to be monitored.

- 
- Tropical moisture continues across the state on the northern and eastern side of Tropical Storm Hanna.
  - Some thunderstorms will be strong, with gusty winds around 45 mph, frequent lightning, waterspouts, and heavy rainfall.
  - An isolated case of flash flooding can't be ruled out, with street flooding in urban areas. **Significant impacts are not expected.**
  - An elevated rip current risk is ongoing at all Panhandle and Atlantic beaches through the weekend.

The next briefing packet will be issued late Saturday morning. For the latest information on the tropics, please visit the National Hurricane Center website at [www.hurricanes.gov](http://www.hurricanes.gov). Daily Weather Packets are published each day in WebEOC Info Message #3518.



# TROPICAL UPDATE



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State Meteorological Support Unit

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